DETAILED ACTION

1. The following is a non-final office action in response to the RCE filed 12/18/09. Amendments received on 12/18/09 have been entered. Claims 11-20 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graziano et al. (US Pub 2002/0111698) in view of Nishi (US Pub 2002/0055977) in view of Clough et al. (6,889,264) and further in view of Kim (US Pub 2004/0006647).

As of claims 11 and 15, Graziano discloses a remote controller (via Web-Based Host 70; see fig. 1) and a method of controlling an operation of a device through a network (via a we-based system for monitoring and/or controlling home devices; see abstract) which enables a terminal device (via remote device 10; see fig. 1) to control an operation of a device through a network (via using network 50, to control the Home 30; see fig. 1), the remote controller comprising:

an address storage (via Web-based host 70, comprising a memory 74 and a database

75; see fig. 6) operable to acquire a current address of the remotely controlled device on the network by communicating with the remotely-controlled device through the network, (via storing the each unique address of the home device in the Web-based host 70; Note: Graziano also discloses that the Web-based host 70 can communicated with the home devices and log the data/information in a database (see paragraph [0038]; also see fig. 6). The Web-based host 70 connects with the home devices through home attendant 31, which is a controller inside the home to receive the signals from the Web-based host 70 to control the home devices. Graziano further discloses that the home attendant can be incorporated inside the device so device can directly communicate with the Web-bases host 70; see paragraph [0048], lines 8-11);
a first communication interface (via Web-based host 70 comprising control panel program 76 that include multiple applications, so the Web-based host can communicate with the home 30 via network 50; see paragraph [0057], lines 1-8) operable to transmit, through the network to the remotely-controlled device based on the address, a status notification request, and operable to receive, from the remotely-controlled device in response to the status notification request, status information indicating a status of the remotely controlled device(Graziano discloses this feature with the example of a temperature controller. For example, the user, using the remote device can send a signal to the web-based host 70 requesting the current temperature of the thermostat via the network 50, web-based host 70 will transmit the signal to the home 30 via the network 50, the home attendant 31 or the device if the home attendant is incorporated within the device will transmit the current temperature via the network 50, to the web-

based host, and web-based host will transmit the signal back to the remote device; see paragraph [0080], Graziano further discloses that at the time of generating account user provides home configuration information to generate customized description of their home, and home configuration information includes behavioral setting which monitors the status of the home devices (remotely controlled device) according to user preference (e.g., day time state, evening state and night state) so web based host system will transmit these information at times specified by user,

a status storage operable to store the status information received from the device (Graziano discloses that the web-based host can transmit the event immediately or it can store the data/information and then transmit at a later time; also see paragraph [0039]);

And a second communication interface operable to transmit the stored status information on the device to the terminal device through the network in response to a status request from the terminal device (via Web-based host 70 comprising control panel program 76 that include multiple applications, so the Web-based host can communicate with the remote device 10 via network 50; see paragraph [0057], lines 1-8; Graziano further discloses that a user can use the remote device to initiate a control command and receive the status information of the device via the web based host 70; see paragraph [0087]; also see fig. 11).

Graziano discloses that the terminal device controls the home device through a network however Graziano fails to explicitly disclose that remote control acquires and stores a current changeable address of the remotely-controlled device at constant time

interval and the first communication interface operable to transmit the status notification request, through the network at constant time intervals. Grazniano further fails to explicitly disclose wherein the first communication interface also receives other status data, spontaneously generated by the remotely controller device at sufficiently narrow predetermined timing intervals to reflect real time status changes in the remotely controlled device.

Nishi discloses a remote control system wherein a remotely controlled device (via electronic equipment 2; see fig. 1) communicate at predetermine timing (constant timing) with a remote controller (via remote control server 1; see fig. 1) (see paragraph [0050]). Nishi discloses that the electronic equipment transmit a State information (status data and other status data, Nishi discloses that the state information contains all kinds information other than such on-off information and quantitative information, according to the type of equipment, such as videos information captured by a monitoring camera or information indicating numerically the extent to which an motorized curtain is closed; see paragraph [0050], lines 19-24) and a Request for a command signal toward the remote control server 1 at predetermined timing (hence remotely controlled device spontaneously transmitting status data/other status data toward the remote controller and upon receiving the state information and request for a command signal the remote control server stores that information in the electronic equipment database 122 (see fig. 6 and 7; also see paragraph [0050]). Nishi further discloses that the state information contain different information about the device. Further it can be seen from fig. 7, remote control server 1 receives the state information

from plurality of electronic equipment (device 1, device 2, device 3 ... device n) and the information is stored according to addresses of each device (for example device 1). Nishi further discloses that after the state information is stored, remote control server 1 checks if it needs to transmit any command to the device which transmitted the state information (see paragraph [0051]). Nishi further discloses that the remote control server 1, transmit signals to the device at constant times (see paragraph [0056]). Since the remote control server 1 receives and transmit signals from and to the device at predetermined timing, it will also receive the address of the device on the network, because in order to differentiate the device from plurality of devices remote control server 1 will need the device's address.

From the teaching of Nishi it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Graziano to include the step of a device spontaneously transmitting status data at predetermined timing toward the remote controls server as taught by Nishi in order to update the memory of remote controller with the latest information about the remotely controlled electronic equipment.

Even though Nishi discloses that the electronic equipment transmit state information toward the remote control server 1 at predetermined time (constant time interval), it would have been obvious to one having ordinary skill in the art that alternatively remote control server 1 can transmit a command toward the electronic equipment at predetermined time to request the status of the device because it would involve a mere reversal of the process performed in Nishi.

In order to support the Examiner's assertion Clough discloses a remote control system, wherein a remote control server (via local server 109) communicates with a device (via peripheral devices 106) through a network (via network 113; see fig. 1). Clough further discloses that local server 109 obtain and store the status information from the peripheral device 106 through the network 113 (see col. 4, lines 4-8). Clough further discloses that to obtain the status information, local server 109 periodically (constant time intervals) requests the status information from each of the peripheral devices via the network 113 (see col. 4, lines 8-11). Clough further discloses that alternatively, peripheral device may transmit the status information to the server 109 through the network (see col. 4, lines 11-14) as disclosed in Nishi above.

From the teaching of Cloguh it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Nishi to include the step of remote control server transmitting the status request periodically (constant time intervals) as taught by Clough in order to more frequently obtain the status information from the device.

However the combination of Graziano, Nishi and Clough fails to explicitly disclose that the remote controller acquires and associates the current changeable address of the remotely controlled device with a fixed identification number of the remotely-controlled device that is stored in the address memory.

Kim discloses a remote control system for home appliance network, wherein a remote controller (via server 100; see fig. 1) enables a user to control a remotely-controlled device through a network (via server 100 enabling a user to control home

appliances via a network 200; see fig. 1; also see abstract). (Note: the Examiner would like to point out that reference of Graziano further discloses that the home attendant can be incorporated inside the device so device can directly communicate with the Web-bases host 70 (see paragraph [0048], lines 8-11), so in the reference of Kim it would have been obvious to incorporate the functionality of home server 300 inside the home appliance so the home appliance can directly communicate with the server 100. So in the office action below the terms home server 300 and home appliance are use interchangeable and they have the same meaning). Kim discloses that the server 100 (remote controller) contains a database 30 (address storage) storing data necessary for allowing the central portal server 100 to manage and control the home appliances (see paragraph [0027]). Kim further discloses that the home server 300 periodically (constant time intervals) transmits an alive message containing a small amount of data for a predetermined period of time (uninterrupted time interval) to maintain the connection with the server 100 (see paragraph [0030]). Kim discloses that alive message is a message in which a varied IP address (current changeable address), a user ID and a user password are packetized (see paragraph [0031]). Kim discloses that the central portal server checks which home server/home appliance transmits the alive message through, e.g., the ID and the password (so the ID and the password functions as a fixed identification number of the home server/home appliance) (see paragraph [0039]). Kim discloses that the database 30 stores the user ID, password and the varied IP address (see paragraph [0028]), hence associating the current changeable address (varied IP address) with a fixed identification number (ID and password).

From the teaching of Kim it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Graziano and Nishi to include the step of associating the current changeable address of the remote controlled device with the fixed identification number so that an existing IP address stored in a database of the central portal server can be updated to a new IP address when the home server, using a new dynamic IP, is connected to the central portal server in order to appropriately connect the central server to home server, so the home server can be adequately managed and remotely controlled by the central server (see paragraph [0008]).

As of claims 12 and 16, Graziano discloses that the first communication interface transmits the status notification request to the device when the status request is received from the terminal device (via web-based host 70 requesting the current temperature upon the user selection from the remote device 10; see paragraph [0080], lines 7-15).

As of claims 13 and 17, Graziano discloses that the device transmits the status information on the device to the first communication controller when the status of the device is changed (via home attendant monitoring the home devices, and upon the occurrence of an event (status change) on home device 40, information is transmitted to the we-based host 70 via network 50; see paragraph [0039]).

As of claims 14 and 18, Graziano discloses that remote-controlled device controlled is operable to detect a status of a subject to be controlled in the remote-controlled device and transmits the detected status to the terminal device in response to

the status notification request (via the home attendant 31 monitoring the home device 40, and upon the occurrence of an event on a home device 40, transmitting the information to the web-based host 70 via the network 50, and web-based host transmitting the information to the remote device 10; see paragraph [0039], also see paragraph [0080] Graziano further discloses that a user can use the remote device to initiate a control command and receive the status information of the device via the web based host 70; see paragraph [0087]; also see fig. 11).

As of claims 19 and 20, Nishi discloses that the remotely controlled device (via electronic equipment 2; see fig. 1) communicate at predetermine timing (constant timing) with a remote controller (via remote control server 1; see fig. 1) (see paragraph [0050]).]). Nishi further discloses that the remote control server 1, transmit signals to the device at constant times (see paragraph [0056]). Kim further discloses that the home server 300 periodically (constant time intervals) transmits an alive message containing varied IP address (changeable address; see paragraph [0030]-[0031]). Further with respect to the limitation that the time intervals at which the device sends the address and the time intervals at which first communication interface transmits the request are different, the Examiner would like to point out that unless any two devices transmit simultaneously, the time intervals of their transmission will be different. Further as disclosed above, in the reference of Nishi if the electronic equipment communicate with the server 1 in the morning, and then the server 1 communicate with the electronic equipment 2 in the evening, the time interval at which two devices transmit signals to each other are different.

Response to Arguments

4. Applicant's arguments filed 12/18/09 have been fully considered but they are not persuasive.

Applicant argues that the combination of Graziano, Nishi and Kim fails to explicitly disclose that the remote control server is "operable to acquire and store a current change-able address of the remotely-controlled device on the network received from the remotely controlled device, which sends the current changeable address through the network at constant time intervals." The Examiner respectfully disagrees. The Examiner would like to point out that the reference of Kim discloses the limitaiton argued above.

Kim discloses a remote control system for home appliance network, wherein a remote controller (via server 100; see fig. 1) enables a user to control a remotely-controlled device through a network (via server 100 enabling a user to control home appliances via a network 200; see fig. 1; also see abstract). (Note: the Examiner would like to point out that reference of Graziano further discloses that the home attendant can be incorporated inside the device so device can directly communicate with the Web-bases host 70 (see paragraph [0048], lines 8-11), so in the reference of Kim it would have been obvious to incorporate the functionality of home server 300 inside the home appliance so the home appliance can directly communicate with the server 100. So in the office action below the terms home server 300 and home appliance are use interchangeable and they have the same meaning). Kim discloses that the server 100 (remote controller) contains a database 30 (address storage) storing data necessary for

allowing the central portal server 100 to manage and control the home appliances (see paragraph [0027]). Kim further discloses that the home server 300 periodically (constant time intervals) transmits an alive message containing a small amount of data for a predetermined period of time (uninterrupted time interval) to maintain the connection with the server 100 (see paragraph [0030]). Kim discloses that alive message is a message in which a varied IP address (current changeable address), a user ID and a user password are packetized (see paragraph [0031]). Kim discloses that the central portal server checks which home server/home appliance transmits the alive message through, e.g., the ID and the password (so the ID and the password functions as a fixed identification number of the home server/home appliance) (see paragraph [0039]). Kim discloses that the database 30 stores the user ID, password and the varied IP address (see paragraph [0028]), hence associating the current changeable address (varied IP address) with a fixed identification number (ID and password). The Examiner would further like to point out that reference of Kim is used to teach that a remote control equipment (via home server 300) periodically (constant time intervals) sends the current change-able address (varied IP address) through the network (via network 200) toward a remote control (via server 300; see fig. 1) and it does not teaches away from the claimed invention as indicated by the applicant (see remarks page 12, lines 1-6).

5. Applicant's arguments with respect to the limitation of “transmitting a status notification request through the network at constant time interval” and “receiving other status data, spontaneously generated by the remote controlled device at sufficiently narrow predetermined timing intervals to reflect real time status changes in the remotely

controlled device" have been considered but are moot in view of the new ground(s) of rejection in view of Clough as disclosed in the rejection of claims 11 and 15 above.

6. All the references applied in the rejection above concerns with the problem of remotely controlling appliances through a network. It is the Examiner's position that the combination of references as applied in the rejection above would have been obvious to one having ordinary skill in the art as disclosed in the rejection above.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /NABIL H. SYED/ whose telephone number is (571)270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571)272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NABIL H SYED/
Examiner
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